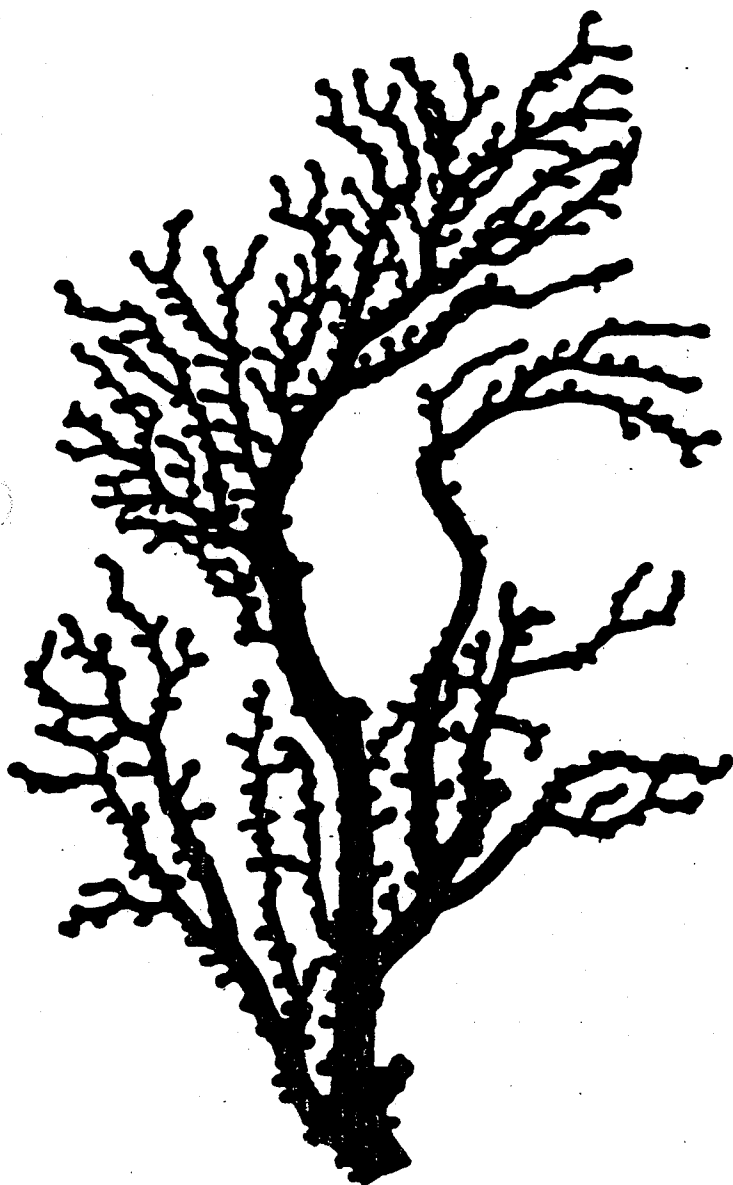


AMENDMENT 1 AND ENVIRONMENTAL ASSESSMENT

**FOR THE FISHERY MANAGEMENT PLAN
FOR THE
PRECIOUS CORALS FISHERIES
OF THE
WESTERN PACIFIC REGION**

MARCH 1988



Prepared By

**The Western Pacific Regional Fishery Management Council
1164 Bishop Street, Suite 1405
Honolulu, Hawaii 96813
Telephone: (808) 523-1368**

WESTERN PACIFIC REGIONAL FISHERY MANAGEMENT COUNCIL

1164 BISHOP STREET - ROOM 1405
HONOLULU, HAWAII 96813
Telephone (808) 523-1368 FTS (808) 541-1974
Telex 7431871 Fax: (808) 526-0824

March 17, 1988

Dear reviewer:

The Western Pacific Regional Fishery Management Council submitted Amendment 1 to the Precious Corals Fishery Management Plan for the Western Pacific Region to the National Marine Fisheries Service for review and approval.

Amendment 1 proposes to:

- 1) include the U.S. Pacific Island Possessions under the FMP as a combined single Exploratory Permit Area with a 1000 kg annual harvest quota for all species of precious coral combined;
- 2) place all species of Corallium (Corallium spp.) in the Management Unit Species of the FMP;
- 3) create a method for issuing Experimental Fishing Permits (EFPs) for fishing in Exploratory Areas.

Please review the enclosed copy of Amendment 1. The public comment period ends May 19, 1988. The Council will review all comments and make revisions in the amendment if necessary.

Submit comments to:


E. Charles Fullerton
Regional Director
Southwest Region
National Marine Fisheries
Service
300 S. Ferry Street
Terminal Island, CA. 90731

With a copy to:

Kitty Simonds
Executive Director
Western Pacific Regional
Fishery Management Council
1164 Bishop Street, Rm. 1405
Honolulu, HI. 96813

Thank you for your assistance.

Sincerely,


Kitty Simonds
Executive Director

**PRECIOUS CORALS AMENDMENT NO. 1
HIGHLIGHTS OF AMENDMENT REVIEW**

Scheduled Day	Dates	Event
(1)	03/24/88	- Received Regional Director; public comment period begins.
(10-11)	04/04-04/05	- Administrator of fishery concurs with Regional Director decision to continue review or disapprove FMP/amendment.
(60)	05/23/88	- Public comment period ends on amendment and proposed rule-making.
(73)	06/03/88	- Regional Director approves/disapproves FMP/amendment and transmit decision memo to headquarters for review and action.
(81)	06/13/88	- Assistant Administrator/Fisheries Regulations Division transmits complete final rule pkg. to Assistant Administrator of Fisheries, with Council letter.
(86)	06/17/88	- Assistant Administrator of Fisheries signs regulations decision memo approving or disapproving final rule. Transmits package to Administrator with copy to Department of Commerce, if approved.
(95)	06/27/88	- Secretary notes decision memo & notifies Assistant Administrator/Fisheries Regulations Division. Regional Director delivers letter to Council or otherwise notifies Council of decision.
(110)	07/11/88	- Assistant Administrator/Fisheries Regulations Division files final regulations with Office of Federal Register. Administrative Procedures Act delayed effectiveness period begins on day of filing.
(140)	08/11/88	- Final regulations effective. End of Administrative Procedures Act delayed effectiveness period.

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1.0 PREFACE

1.1 Responsible Agencies

The Western Pacific Regional Fishery Management Council (the Council) was established by the Magnuson Fishery Conservation and Management Act (MFCMA), as amended, to develop Fishery Management Plans (FMPs) for fisheries in the U.S. Exclusive Economic Zone (EEZ) around Hawaii, the territories (American Samoa, Guam), and possessions of the United States in the Pacific (Figure 1). Once an FMP is approved by the Secretary of Commerce, it is implemented by Federal regulations and enforced by the National Marine Fisheries Service (NMFS) and the U.S. Coast Guard in cooperation with state and territorial agencies.

For further information, contact:

Ms. Kitty Simonds
Western Pacific Regional
Fishery Management Council or
1164 Bishop Street, Suite 1405
Honolulu, Hawaii 96815
Telephone: (808) 523-1368

Mr. Doyle Gates
Western Pacific Program
Office National Marine
Fisheries Service
P.O. Box 3830
Honolulu, Hawaii 96812
Telephone: (808) 955-8831

1.2 Public Review and Comment

The Regional Council involves fishermen and other parties interested in developing FMPs and amendments. This ensures that those who can be affected have the opportunity to submit their views on the proposed action and alternatives to the Council.

The rule changes proposed by this amendment have been considered by the Council for several years. During that time period they have been discussed at meetings of the Council's Scientific and Statistical Committee, the Council's Precious Coral Plan Development Team, and the industry Advisory Panel.

On February 5, 1988, a draft summary of this document was distributed to fishermen interested in harvesting precious corals and to all fishermen presently engaged in commercial fisheries in the Northwestern Hawaiian Islands (NWHI). In addition, this amendment was presented and discussed at two public hearings held in Honolulu, Hawaii; one on May 19, 1987, and the other on February 16, 1988. Verbal and written comments were solicited at each public hearing. The closing date for written comments from the most recent hearing is March 1, 1988.

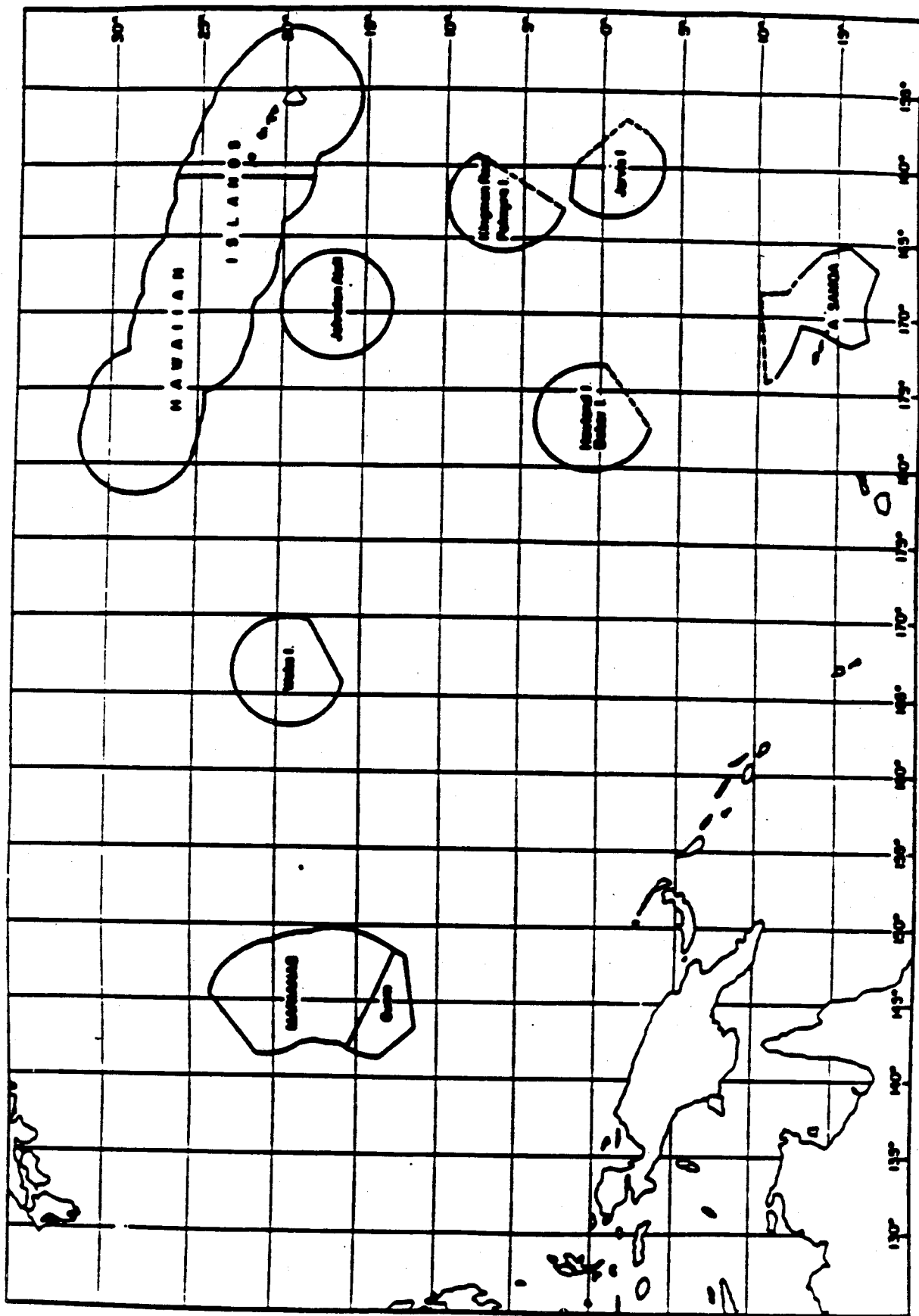


Figure 1. Area of Council Jurisdiction. Boundaries of the Exclusive Economic Zone around Hawaii, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Possessions.

1.3 Relationship to Applicable Laws and Policies

This first amendment to the FMP for the Precious Corals attempts to correct a major inadequacy of the FMP: that is, the fishery has not developed as the FMP intended. Information and analysis in support of the proposed action are presented in a manner intended to satisfy MFCMA requirements as well as requirements of other applicable laws and policies.

The FMP for the Precious Coral Fisheries for which the Amendment is being prepared satisfies the information and procedural requirements of the National Environmental Policy Act of 1969, the Regulatory Flexibility Act, Executive Order 12291, and other laws and directives. The FMP also served as an environmental impact statement (EIS). Similarly, this amendment is intended to serve as an Environmental Assessment. The amendment assesses the economic and administrative/enforcement impacts of the proposed regulatory changes, and will satisfy the requirement for a Regulatory Impact Analysis. This document contains all the information necessary under the several statutes and directives applicable to the planning process. A copy of the original FMP and companion regulations may be obtained from the Council.

In addition, this amendment provides information regarding habitat and vessel safety concerns, as required by the 1986 amendments to the MFCMA.

1.4 List of Preparers

This FMP Amendment was prepared by:

Paul D. Gates, Staff Biologist
Western Pacific Regional Fishery Management Council

Justin Rutka, Staff Economist
Western Pacific Regional Fishery Management Council

with considerable input from the following members of the Precious Coral Fishery Plan Monitoring Team and Advisory Panel

Dr. Richard Grigg, Plan Monitoring Team Chairman
Department of Oceanography
University of Hawaii

Dr. Sam Pooley, Industry Economist
Fisheries Management Research Program Leader
National Marine Fisheries Service - Honolulu Laboratory

Dr. Robert Skillman
Fishery Biologist Research, Supervisor
National Marine Fisheries Service - Honolulu Laboratory

Mr. David Hamm
Computer Systems Analyst
National Marine Fisheries Service - Honolulu Laboratory

Mr. Cliff Slater, Advisory Panel Chairman
Maui Divers, Ltd., President
Honolulu, Hawaii

Mr Frank Goto,
United Fishing Agency, General Manager
Honolulu, Hawaii

1.5 Acknowledgements

The Council wishes to acknowledge the input and cooperation of the members of the industry and the fishing community. Individuals from those groups have graciously made private information available, explained features of their operations, and patiently assisted the Council in the formulation of this amendment.

The Council also wishes to extend a special acknowledgement to Dr. Rick Grigg for his substantial contributions to understanding the biology, life histories, and world fisheries of precious corals.

2.0 BACKGROUND

2.1 Species of Concern and Their Biological Characteristics

Harvesting of deep-water precious corals is subject to the regulations of the FMP which became effective on September 29, 1983. The FMP covers domestic and foreign fishing for pink, gold, and bamboo corals in the U.S. EEZ of the Western Pacific Region. These species of precious corals are found in deep water (350-450 m and 1,000-1,500 m) on solid substrate where bottom currents are strong. Precious corals are slow-growing and are characterized by low rates of mortality and recruitment. Natural populations are relatively stable, and a wide range of age classes are generally present. This life history pattern (longevity and many year classes) has two important consequences with respect to exploitation. First, the response of the population to exploitation is drawn out over many years. Second, because of the great longevity of individuals, and the associated slow rates of turnover in the populations, a long period of reduced fishing effort is required to restore the ability of the stock to produce at Maximum Sustained Yield (MSY) if a stock has been overexploited for several years.

2.2 Distribution in the EEZ

The FMP identifies the problem of managing a resource of unknown dimensions characterized by slow growth, low rates of mortality, and low rates of recruitment. Precious corals are known to exist in the EEZ around Hawaii and very likely exist in the EEZ around American Samoa, Guam, the Commonwealth of the Northern Marianas, and U.S. possessions in the Pacific, but virtually nothing is known of their distribution and abundance in these areas. So far, beds of pink, gold and/or bamboo coral have been found at six locations, all in the EEZ around the Hawaiian Archipelago. The annual sustainable harvest from these six beds is estimated at approximately 3,000 kg per year for all species of precious corals combined. Very small beds of deepwater precious corals have recently been discovered on a bank east of French Frigate Shoals and on the Cross Seamount southwest of the island of Hawaii, but these beds are too small for commercial harvests.

Until recently, all of the known beds of deep-water precious corals in the EEZ of the Western Pacific Region were in the Hawaiian Islands Archipelago. In 1987, a research vessel discovered precious corals in the EEZ around Palmyra. The extent of the Palmyra discovery is not presently known. Beds of precious corals are almost certain to exist within the EEZ around other island areas. Of the known beds in the Hawaiian Island

chain only the Makapu'u bed off Oahu has been accurately surveyed for commercial densities.

2.3 Existing Management Measures

The FMP considers precious coral beds as separate management units because known beds are patchily distributed and widely separated from each other. The beds are classified as Established, Conditional, or Exploratory. Established beds are ones for which estimates of maximum sustainable yields are reasonably precise. So far only Makapu'u bed has been studied adequately enough to be classified as Established. Conditional beds are beds for which an estimate of MSY exists. MSYs for Conditional beds are figured by comparing the size of the beds to that of the Makapu'u Bed and then multiplying that ratio by the yield from the Makapu'u Bed. It is assumed that ecological conditions at the Makapu'u bed are representative of conditions at all other beds. Five beds of precious corals are classified as Conditional, all of them off the Hawaiian Islands (Figure 2). Exploratory Permit Areas are the unexplored portions of the EEZ in which precious coral beds are almost certain to exist, but no beds have yet been located. There are three such areas: the EEZ seaward of the State of Hawaii, and the EEZ seaward of both American Samoa and Guam. The FMP provides allowance for domestic or foreign fishing in Exploratory Permit Areas, up to a maximum of 1,000 kg, all species combined, per area, per year.

The regulations prescribe methods of harvest for each class of coral bed and harvest quotas for individual beds. Only selective gear is permitted in the EEZ around the main Hawaiian Islands, i.e., south and east of a line midway between Niihau and Nihoa Islands. Use of both selective and nonselective gear is permitted on the NWHI Conditional beds of Brooks Bank and the 180° Fathom Bank and throughout the Exploratory Area of the NWHI. Quotas have been established for pink, gold, and bamboo coral populations in the Makapu'u bed and in the Conditional beds. If tangle net dredges are employed on Conditional beds, the weight quota is only twenty percent of that allowed for selective harvesters. In addition to regulating harvesting methods and harvest amounts, the FMP establishes a procedure for upgrading coral beds from Exploratory to Conditional and from Conditional to Established as new beds are located and more catch/effort data become available which will allow more precise determinations of sustainable yields.

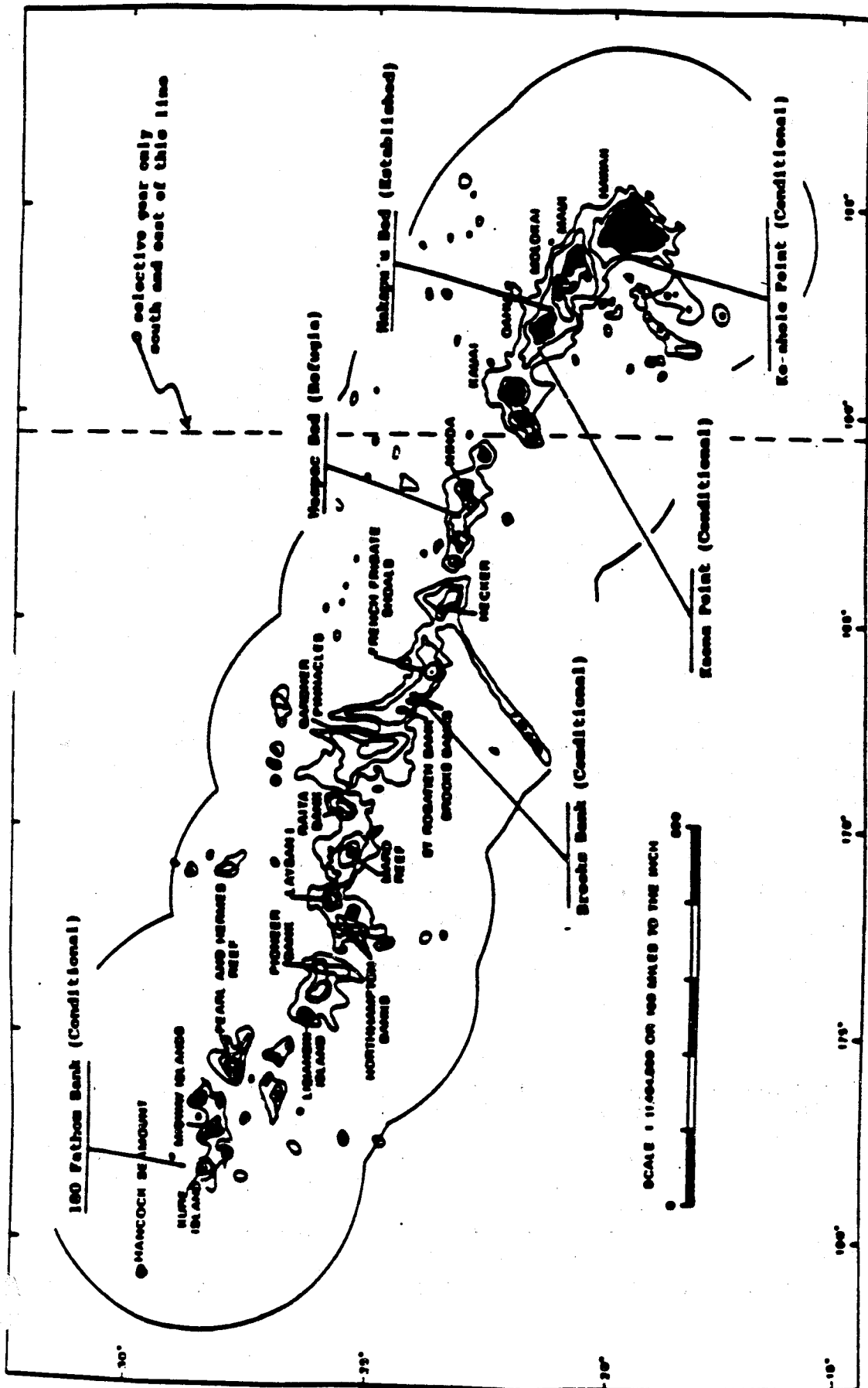


Figure 2. Locations of known coral beds and the Hawaiian Islands Exploratory Permit Area. Bed type is in parentheses.

3.0 Proposed Actions

3.1 List of Proposed Actions

The actions of Amendment 1 to the Precious Corals FMP of the Western Pacific Region are to:

1. Include the U.S. Possessions under the FMP as a combined single Exploratory Area (X-P-PI) with a 1000 kg annual harvest quota for all species of precious corals combined;
2. Place all species of Corallium (Corallium spp.) harvested or likely to be harvested by the fishery within the Management Unit Species (MUS) of the FMP;
3. Create a method for issuing Experimental Fishing Permits (EFPs) for fishing within Exploratory Areas.

In addition, the amendment provides information on habitat and reviews safety concerns, as required by 1986 amendments to the MFCMA.

3.2 Location of the Proposed Actions

The first proposed action specifically applies to the U.S. EEZ surrounding Wake Island, Johnston Atoll, Kingman Reef and Palmyra Island, Jarvis Island, and Howland and Baker Islands. Proposed action 1 will consolidate the portions of the EEZ which surrounds those islands into a single Exploratory Area (Figure 1).

The second and third proposed actions apply to all Exploratory Permit Areas of the EEZ under jurisdiction of the Council (Figure 1).

4.0 Need for Amendment 1

- 4.1 Include the U.S. Possessions under the FMP as a combined single Exploratory Area (X-P-PI) with a 1000 kg annual harvest quota for all species of precious corals combined

There are no regulations in place that govern the harvest of precious corals in the federal waters surrounding the U.S. Pacific Island Possessions. When the Precious Corals FMP was approved by the Assistant Administrator of Fisheries in September of 1980, Federal waters around the U.S. Pacific Island Possessions were not within Council jurisdiction. In 1983, Congress passed Public Law 97-453, which amended the MFCMA. That law extended Council jurisdiction to the EEZ around U.S. Pacific Island Possessions. In anticipation of P.L. 97-453, the FMP document contained specific language regarding fishing for precious corals in those areas. Those passages are footnoted to highlight the fact that those management measures were recommendations to the Secretary of Commerce until such time that fisheries management authority for the Pacific Island Possessions transferred to the Council.

The management measures described for federal waters around island possessions are consistent with the regulations in place for the other Exploratory Areas defined in the FMP. Exploratory Areas are the unexplored portions of the EEZ in which coral beds are almost certain to exist but where no beds have yet been located. The Island Possessions would be incorporated into a single Exploratory Permit Area designated as X-P-PI, with a 1000 kg annual harvest quota for all species of precious corals combined.

The first proposed action of this amendment will formally incorporate those areas into the Fishery Management Plan for Precious Corals.

This action would prevent unregulated domestic fishing for precious corals in the EEZ around Palmyra where precious corals were recently discovered.

- 4.2 Place all species of Corallium (Corallium spp.) harvested by the fishery within the Management Unit Species of the FMP

The definition of precious corals contained in the regulations of the FMP is restrictive. It does not adequately recognize the present taxonomic uncertainties that exist (Midway Deep-sea coral), or the probability for discovery of new species of precious corals. That approach saddles management with the all too familiar role of catch-up rather than one of prudent anticipation.

Through history, precious coral fisheries have followed the pattern of exploration, discovery, exploitation, and depletion (Grigg 1976). The FMP points out that given what is known regarding life histories and population dynamics of precious corals the role of catch-up is particularly risky as a management strategy. Precious corals are particularly long lived, and beds, or populations, are characterized by low rates of recruitment and natural mortality which produce extremely slow turnover rates. That combination of qualities means that precious coral beds recover very slowly from overharvesting.

The most precious of the precious corals are in the genus Corallium (Grigg 1984). Seven varieties of precious pink and red corals are recognized in the Pacific, six of which are considered distinct species of Corallium (Grigg 1981). There may be other species of pink coral not yet taxonomically classified. Expanding the MUS from the three species of Corallium listed in the regulations to the entire genus (Corallium spp.) is in keeping with the intent of the FMP. Additionally, there is sufficient evidence to predict that domestic coral fishermen will harvest species of Corallium not currently listed in the FMP regulations definition of precious corals.

In 1980-81, Japanese vessels made a big coral strike when fishermen discovered Midway Deep-sea, a still undescribed (and therefore unnamed) species of Corallium, northwest of Midway Island, on the Emperor Seamounts at depths between 1,000 and 1,500 m. The Milwaukee Banks are only 280 miles from the northwest portion of the Hawaiian Islands Exploratory Area. Table 1 includes approximate volumes of Deep-sea Midway that were harvested by foreign draggers in the years following its discovery. These harvest figures indicate the potential of the coral fishery in the Northwestern Hawaiian Islands.

Table 1. Estimated landings and value of precious corals harvested in the Pacific: 1979-1983. (Grigg 1983; Grigg 1984).

Year	Area	Traditional Grounds		Midway		Total	
	Production	Volume kg	Value \$/kg	Volume kg	Value \$/kg	Volume kg	Value \$/kg
	Country						
1979	Taiwan	13,000 ^b	-	110,000 ^b	-	123,000 ^b	99 ^b
	Japan	14,516 ^a	400	76,988 ^a	90	91,504 ^a	139 ^a
	Totals	27,516		186,988		214,504	116
1980	Taiwan	16,000 ^c	-	138,000 ^c	80-100 ^d	154,000 ^c	-
	Japan	10,227	530	74,228 ^a	82	84,455 ^d	137 ^a
	Totals	26,227		212,228		238,455	-
1981	Taiwan	14,000 ^c	-	240,000 ^b	25-150 ^{b-d}	254,000	-
	Japan	9,786 ^a	541	44,471 ^a	72	54,257 ^a	156 ^a
	Totals	23,786		284,471		308,257	-
1982	Taiwan	13,200 ^d	-	52-60,000 ^d	69 ^d	~69,200	-
	Japan	~8,000 ^d	-	28,000 ^d	48-74	36,000	-
	Totals	~21,200	-	~84,000	-	105,200	-
1983	Taiwan	6,500	490	90,000	69	96,500	-
	Japan	1,781	532	49,313	62	51,094	-
	Totals	8,281		139,313		147,594	-

Exchange rate of 40 NT/\$1 U.S.

" " " 270 ¥/\$1 U.S.

Sources: 1. For landings in Japan: a) All Japan Coral Fishing Association.
2. For landings in Taiwan b) Fung Mei Coral Co., c) Grigg, 1982; d) Based on 1982 interviews.

Due to the close proximity of banks in U.S. waters to the Milwaukee Banks of the Emperor Seamount Group, and the common geomorphology of all the islands and banks along the Hawaiian Ridge, it can be predicted that at least Midway Deep-sea (Corallium sp. nov.) will be harvested by domestic fishermen.

The area of habitat suitable for precious corals in the Exploratory Areas is vast and spans a wide range of latitude (Tables 2 and 3). Species of Corallium other than those listed may be discovered once activity in the fishery commences and expands to those less known regions.

Table 2. Range and area of EEZ in the Western Pacific Region.

Exploratory Area	Latitude Range	Area of EEZ (nmi ²)
Hawaii	35°N - 18°N	648,000
American Samoa	≈10°N - 17°30'S	75,000
Guam	≈15°40'N - 11°N	60,000
CNMI*	≈23°40'N - 12°20'N	251,000
Pac. Is. Poss.	(see Figure 1)	
Howland and Baker		83,000
Jarvis		125,000
Johnston Atoll		83,000
Kingman Reef & Palmyra		60,000
Wake Island		125,000
		<u>476,000</u>
TOTAL EEZ AREA		1,511,000

* No language in this amendment refers to the Commonwealth of the Northern Mariana Islands because of differences of legal opinion between the CNMI and the U.S. Government over fisheries jurisdiction.

Table 3. Estimated areas of deep water (Midway Deep-Sea) and shallow water precious corals (Corallium secundum) in the EEZ around the Hawaiian Islands. (Council files).

Type of Precious Coral	Depth Range	Btm Area (nmi ²)
<u>Corallium secundum</u>	350 - 450 m	1702
Midway Deep-Sea (<u>Corallium</u> sp. nov.)	1000 - 1500 m	5876

4.3 Create a method for issuing Experimental Fishing Permits (EFPs) for fishing in Exploratory Areas

The primary intent of the FMP was to achieve the optimum yield of precious corals from the EEZ within the Western Pacific Region. The FMP attempted to strike a balance between protection of coral resources while creating enough incentive to stimulate development of a domestic fishery. In turn it was hoped that the newly developed domestic fishery would discover coral beds in the Exploratory Areas. The catch data provided by commercial vessels would be used to assess the resources and refine the management of the fishery. Once sufficient data were accumulated, beds in Exploratory Areas would be elevated to Conditional and then Established bed status. MSYs for each bed would be calculated, and discreet quotas would be assigned.

In view of the apparent ease with which the resource could be overfished, the Council set an initial quota of 1000 kg in each of the three Exploratory Areas defined in the FMP regulations. At that time the Council and its advisory bodies believed that 1000 kg quotas provided enough incentive to stimulate exploration and discovery of new beds, particularly by vessels that employed low cost traditional dredge and tangle-net technology.

Time has proved that expectation to be incorrect. No fishermen, domestic or foreign, have legally fished for precious corals within the EEZ of the Western Pacific Region since 1979. From 1973-79 Maui Divers, a domestic firm, harvested precious corals from the Makapu'u Bed with a manned submersible. Prohibitively high insurance costs forced a curtailment of their fishing operation in 1979. Over the years since, the Council office has fielded numerous inquiries from a wide range of interested parties, but still no legal fishing has taken place in any Exploratory Area. Only two potential operators have obtained permits under the FMP, but neither has fished. Potential operators have persistently complained that the 1000 kg quota for Exploratory Areas is too low. None of them feels that the capital investment needed to enter the fishery can be justified,

not even by the relatively lower cost dredging operations. Potential operators have suggested a wide range of larger quotas for Exploratory Areas, from 4,000 - 15,000 kg annually.

The quota amounts suggested were inextricably linked to the intended method of harvest. Dredging - that is "stones" with tangle nets or mops attached - is the most common method worldwide. It's technologically unsophisticated and requires relatively low capital investment. The other fishing alternative is highly sophisticated and costly. It employs a manned or unmanned submersible. The widely different start-up costs are used to justify substantially different quota requests which are geared toward securing financing and a reasonable probability of making a profit.

The Council and its advisory bodies endorse the concept of higher quotas in principle, but hesitate to make changes because sufficient information on the precious coral resources within the Exploratory Areas does not exist. Any present change in area quotas must rely heavily on operational economics and conjecture rather than on hard biological data. The Council does not think it prudent management to increase quotas indefinitely under the FMP for a resource that can be easily depleted before enough direct evidence exists to support such changes.

It's not likely that State or Federal agencies will fund and pursue assessment programs for precious corals in the Exploratory Areas. The Council must depend on industry to provide accurate data on the extent and abundance of precious corals so that quotas can be thoughtfully and cautiously revised. However, the present quotas have created a dilemma; they are too low to stimulate fishing activity. Therefore no new data, which would be used to bring quotas in line with resource abundance, are being gathered.

An Experimental Fishing Permit for Exploratory Areas would assist to 1) stimulate development of the precious coral fishery, 2) encourage domestic involvement in the fishery, and 3) generate much needed information for accurate assessment of the resource. The EFP would be issued by the Regional Director, Southwest Region, NMFS, following review and consideration of advice from the Council, the Coast Guard, the State(s) adjacent to the area to be fished, and the public. Receipt of, and decisions on EFP applications will be noticed in the Federal Register. Additionally, the Council will develop and distribute guidelines that it will use for evaluating and making recommendations on EFP applications for the Regional Director to consider during his review of EFP applications. Conditions could be imposed on the permit holder to limit risk to precious coral stocks or other marine resources. Among the possible limits could be time or area constraints, harvest limits, gear controls, and observer requirements. Harvest quotas assigned to each EFP will be more

directly related to individual operational economics than existing Exploratory Area OYs (Section 8.3). Precious corals harvested in accordance with EFPs are not intended to affect Exploratory Area quotas available to vessels that fish under the existing permit system. The FMP stipulates that vessels can only hold one valid permit. Permittees must surrender one permit prior to being issued a permit to fish in another Exploratory Area. This provision prevents fishermen from simultaneously holding an Exploratory Area Permit and an EFP.

4.4 Habitat and Safety Issues

Amendments to the MFCMA in 1986 require that new FMPs or the next amendment to any FMP already in place 1) include readily available information on the condition and importance of the habitat for the management unit species, and 2) review any access provisions in the FMP to determine if adjustments are needed for safety reasons. The information on habitat is presented in Section 6.1. The information on safety is contained in Section 10.6.

5.0 Description of the Fishery

Precious corals are important deep-water resources frequently found on seamounts. The fishery extends worldwide, but the richest beds exist on seamounts in the western Northwest Pacific Ocean and the western Mediterranean Sea.

5.1 In International Waters

Although precious corals fisheries have existed in the Mediterranean Sea since ancient times, beds of precious corals of commercial densities were not discovered in the Pacific until the early 19th century, off Japan. Until recent years, the precious corals fisheries were centered off Japan, Okinawa, and Taiwan in the far western Pacific. In 1966, about 95% of the world's production of precious corals was dredged from these areas by Japanese and Taiwanese fishermen. Depletion of coral beds in these areas, however, led to wide-ranging exploratory efforts. In 1965, Japanese coral dredgers discovered a very large bed of precious corals on the Milwaukee Banks which lie on the junction of the Emperor Seamounts and the Hawaii Ridge system. Since that time, the center of the world's precious corals harvests has shifted from the traditional grounds in the far western Pacific to the newly discovered grounds in the Emperor Seamounts, around 500 miles west of Midway Island. Because Midway Island is the nearest island to the Emperor Seamounts fishing grounds, coral dredged from this area has been labeled in the trade as "Midway" corals. In 1980, the Midway area accounted for 90% of the world's production of precious corals. In 1983, vessels from Taiwan and Japan dredged up about 140,000 kg of pink coral from the Midway area, which amounted to about three-quarters of the world's production for that year.

For the past five years, more than half of the world's landings have come from the region of the Emperor-Hawaiian Ridge Seamounts, but only about 10% of the "Midway" grounds lie in the U.S. EEZ near the Hancock Seamount area in the northwest edge of the EEZ. The fishery is unregulated, for the most part, because most beds of precious corals are found outside of territorial limits in international waters. Ex-vessel revenues from the fishery are substantial (Table 4), however ex-vessel revenues in a strict sense fail to provide an accurate barometer of the value of the industry (Section 5.4). Worldwide, the current annual ex-vessel revenue from the fishery is estimated at near \$50 million (Grigg pers. comm.).

Table 4. Estimates of ex-vessel revenues from precious coral landings in Japan and Taiwan, 1979 -1983. (Derived from figures in Grigg 1982; 1982a; 1983).

Year	Landings (kg)	Ave Price \$/kg	Ex-vessel Revenue (US\$ millions)
1979	214,504 (87)*	116	24.9
1980	238,455 (89)	106	25.4
1981	308,257 (92)	121	37.4
1982	105,200 (80)	158	16.6
1983	197,594 (91)	149	29.4

* Number in parentheses lists percent of coral from Midway grounds in annual landings.

5.2 Domestic Fishing in the EEZ

Domestic participation in harvesting precious corals began in 1966, when U.S. scientists discovered a commercial bed of pink coral off Makapu'u Point, Oahu in the Molokai Channel. Shortly thereafter, a small group of fishermen began dredging this bed on a small scale. Research at the University of Hawaii by the Sea Grant Program led to the development of a selective harvesting system utilizing a manned submersible. Adopting this system, Maui Divers of Hawaii, Ltd., began harvesting the Makapu'u Bed in 1973. High operating costs led to the discontinuation of this operation in 1979. Since then no domestic fishing for deep-water precious corals has taken place, although there has been renewed interest from time to time among domestic fishermen, including Maui Divers, to enter the fishery.

5.3 Foreign Poaching

The large yields reported to have been taken by foreign fishermen from the Milwaukee Banks of the Emperor Seamounts in recent years are indications of harvest potentials for precious corals in the EEZ. Even though most precious coral resources are outside the U.S. EEZ in international waters, foreign interest in U.S. precious coral has been keen. In 1980, and again in 1981, about 10,000 kg of pink coral was harvested by Taiwanese fishermen in the U.S. EEZ surrounding the NWHI (R. Grigg pers comm.). In 1981 alone, there were 21 documented violations of illegal fishing by Taiwanese and Japanese vessels inside the EEZ in the Hancock Seamount area. No violations of the EEZ were observed by the U.S. Coast Guard in 1982 and 1983, although a source who has ties with Taiwanese fishermen reported

that some illegal fishing did occur in the Hancock Seamount area. The record of violations continued in April 1984 when the Coast Guard seized a coral dragger for fishing in the Hancock Seamount area without a permit. It has been reported that about 20 Taiwanese coral draggers poached about 100 tons of precious corals from seamounts inside the EEZ north of Gardner Pinnacles and Laysan Island during 1985. This much coral has an ex-vessel value of around \$10 million. Reports of past foreign operations and the continued detection of illegal operations by foreign draggers in the EEZ of the NWHI provide indirect evidence that there are more coral beds scattered throughout the EEZ waiting to be discovered by domestic fishermen, but only if there is sufficient incentive to induce exploratory fishing.

5.4 Value of the Precious Corals Fishery/Industry

The economic potential of a domestic precious coral fishery cannot be appreciated without examining the related industry. Precious corals are used to produce value-added products. Through the sale of both unprocessed and processed coral, the value of the product is increased by about 33 percent (Grigg 1982). In 1980, for Taiwan and Japan combined the precious coral industry was worth approximately \$50 million (Table 5).

The present value of the precious coral industry in Hawaii through retail sales of souvenirs and jewelry is estimated to be between \$17 and \$25 million (Grigg and Slater pers. comm.). That value is for imported precious coral. If the coral were domestically produced, the authentic nature of a Hawaiian product could increase the existing value-added component.

Table 5. Estimated value of the precious coral industry in Taiwan and Japan: 1980. (Reproduced from Grigg 1982).

A. Landings of Midway coral in Taiwan in 1980		138,000 kg
1.	10% is exported unprocessed at US\$100 per kg.	US\$ 1,380,000
2.	10% processed in Taiwan factories where the value added is 1.3 x to US\$130 per kg; coral is sold at the retail level at a markup of 3 x.	US\$ 5,382,000
3.	80% is processed for export by trading companies at US\$100 per kg with 1.3 x value added.	US\$14,352,000
Total A		US\$21,114,000
B. Landings of far western Pacific coral in Taiwan in 1980		16,000 kg
1.	50% is exported unprocessed to Italy and Japan at an average of US\$600 per kg (highest quality material is not exported, hence the average price is less than US\$1000 per kg).	US\$ 4,800,000
2.	10% processed in Taiwan factories where the value added is 1.3 x to US\$1000 per kg; coral is sold at a retail level at a markup of 3 x.	US\$ 6,240,000
3.	40% is processed for export by trading companies at US\$1,000 per kg with 1.3 x value added.	US\$ 8,320,000
Total B		US\$19,360,000
Total A + B		US\$40,474,000
C. Value estimate of precious coral products from Japan for 1980.		
Total C		US\$13,000,000
Total Value: A + B + C		US\$53,474,000

6.0. Condition of Precious Coral Stocks in the U.S. EEZ Surrounding the Hawaiian Islands

In the FMP, precious corals beds are treated as distinct management units because of their widely separated patchy distribution, and the sessile nature of individual colonies, even though recruitment may be dependent on reproduction at other coral beds. There are six known precious coral beds, all in the EEZ of the Hawaiian Islands, for which harvest yields have been established. Five of these beds are quite small and have never been commercially exploited. The only domestic commercial fishery for precious corals existed in the Makapu'u bed for six years from 1974 through 1979. During this period about 17,500 kg of pink coral was collected from the bed (Grigg in press). This represents about 40% (by weight) of the estimated standing crop of pink coral in the entire bed.

Transect surveys of the Makapu'u bed were conducted with a manned submersible in 1971, early 1983, and late 1985. The 1971 survey was conducted before any commercial harvesting had taken place. The 1983 and 1985 surveys were completed about three and six years, respectively, after harvesting had ceased. One of the most significant findings of the surveys was that harvesting had no apparent effect on the rate of recruitment which showed no change between 1971, 1983 and 1985. The combined mean density for all megafaunal species of precious coral in the Makapu'u bed did not change significantly between 1971 and 1985 and is approximately 0.1 colonies per square meter (Grigg in press). The low densities indicate that space is not a limiting factor for megafaunal populations in the Makapu'u bed. Furthermore, there is little indication of age-specific differences in natural mortality.

The age frequency distributions observed in the 1983 and 1985 surveys, when compared to the age frequency distribution of the virgin population in 1971, provide a measure of impact caused by harvesting as well as a measure of the potential of precious coral resources to recover. By comparing the 1985 and 1971 age frequency distributions of pink coral it is predicted that full recovery of the Makapu'u bed to the virgin state will require at least 15, but more nearly 25 years. Apparently recovery is a simple function of slow growth gradually in-filling year classes that were removed by harvesting. Recruitment appears unaffected by harvesting and is independent of the density of the standing stock. In short, recruitment in the Makapu'u bed may be wholly dependent on outside sources. The Makapu'u bed appears to be healthy enough to once again sustain a small domestic harvest quota.

Nothing is known about the status of the precious coral resources in the Exploratory Areas. The U.S. does not even know the precise location where foreign draggers have reportedly

poached surprisingly large quantities of precious corals in the EEZ of the NWHI. About 10,000 kg was reportedly poached by foreign fishermen in 1980 and again in 1981 inside the EEZ in the area of the Hancock Seamounts. This is nearly three times the amount of coral allowed to be harvested from the Makapu'u bed and the five Conditional beds in the Hawaiian Archipelago combined. It's ten times greater than the existing harvest quotas for entire Exploratory Areas. If the 90,000 kg reported figure for poaching is accurate, then in 1985, foreign draggers poached about thirty times the amount of coral lawfully allowed by the FMP. The magnitude of this estimate (a large share of the world's production) casts some doubt on its validity. Nonetheless, it underscores the fact that the amount of illegally harvested coral is substantial.

With the exception of the Makapu'u bed and those beds harvested by foreign fishermen, all other precious coral beds within the U.S. EEZ are believed to be in an unexploited or "virgin" state.

6.1 Habitat of Precious Corals

Although precious corals inhabit distinct non-overlapping vertical zones, habitat requirements are strikingly similar. Precious corals are only found on solid substrate in areas where bottom currents are frequently strong (Grigg 1974). Currents work on the substrate to prevent sediment build up, which would keep new larvae from settling and smother young colonies. Living colonies orient themselves perpendicular to the prevailing current pattern, and although currents carry food to corals, the full importance of currents to living colonies is not clear. Precious corals have been recorded growing on a variety of substrate types, however, experienced Japanese fishermen have reported that coral catches are largest on limestone or shell-sandstone bottoms (Grigg 1971). Basaltic and metamorphic bottoms which support precious coral beds are often veneered with a thin crust of limestone.

In Federal waters, precious corals occur in two principal depth zones; 350-450 m and 1000-1500 m. In the Hawaiian Island chain these zones encompass 1700 nmi.² and 5900 nmi.² of potential habitat, respectively, and range from 18 to 35 degrees N. latitude (Wespac files).

A variety of other animals are known to co-occur with precious corals; both invertebrates and fish. Species of possible commercial importance recorded within precious coral beds are Etelis coruscans (onaga), Seriola dumerilii (kahala), and the shrimp Heterocarpus ensifer. However, no species of either threatened or endangered wildlife is known to occur at depths where precious corals are found in the western Pacific.

The habitat sustaining precious corals is generally in a pristine condition. There are no known areas which have sustained damage due to resource exploitation, notwithstanding the alledged heavy fishing for corals in the Hancock Seamounts area. Although it presently appears unlikely, if future development projects are planned in the proximity of precious coral beds, care should be taken to prevent destruction of or damage to the beds. Projects of particular concern would be ones that will generate sediments or substantially modify sediment deposition or water movement patterns.

The Council has established a standing committee on Ecosystem and Habitat. That committee will advise the Council on potential threats to precious corals habitat from other resource uses and will recommend steps to prevent or mitigate adverse impacts on the coral resources.

7.0 List of Proposed Actions and Alternatives

7.1 Possessions

- a. Include the U.S. Possessions under the FMP as a combined single Exploratory Area with a 1000 kg annual harvest quota
- b. No action

7.2 Species in the Fishery Management Unit

- a. Place all species of Corallium (Corallium spp.) harvested by the fishery within the Management Unit Species (MUS) of the FMP
- b. Only place Midway Deep-sea (Corallium species novum) in the Management Unit Species (MUS)
- c. No action

7.3 Experimental Fishing Permit (EFP) System

- a. Create a provision for an Experimental Fishing Permit (EFP) for fishing within Exploratory Areas
- b. Increase annual harvest quotas for Exploratory Areas
 - 1. Establish a single increased quota
 - 2. Establish two distinct quotas; one for selective gear and one for nonselective gear
- c. No action

8.0 Impacts of Alternatives

8.1 Possessions

A. Impact of the Preferred Alternative

1. Include the U.S. Possessions under the FMP as a combined single Exploratory Area (X-P-PI) with a 1000 kg annual harvest quota for all species combined.

This alternative would apply the provisions of the FMP to the federal waters that surround the U.S. Pacific Island Possessions. This would preclude any necessity by the Secretary of Commerce to formulate a Plan or action with respect to Section 304 (c) of the MFCMA.

The Council anticipated P.L. 97-453 when the Precious Corals FMP was being researched and developed. The FMP addressed the EEZ of those island areas with regard to precious corals. When the plan was implemented those management measures were recommendations to the Secretary of Commerce. This proposed action would simply remove the recommendation aspect from the management measures already proposed in the plan.

The amendment would place the Pacific Island Possessions within a single Exploratory Area (X-P-PI) with a 1000 kg annual harvest quota for all species of precious corals combined. This would establish consistent management measures and regulations for all Exploratory Areas. The Council recognizes the shortcomings of the 1000 kg annual harvest quota, particularly the fact that it is not related to the actual abundance of precious corals. However, there is not sufficient evidence to recommend an alternative value at the present time.

This action should be considered in the context of proposed action 3, i.e., establishing an Experimental Fishing Permit system. This action would place the U.S. Pacific Possessions under the Precious Corals FMP in the most efficient fashion possible. The EFP action would authorize issuance of Experimental Fishing Permits, frameworked to encourage fishing while gathering the scientific data necessary to make adjustments in Exploratory Area quotas (Sec. 8.3).

The language regarding the Magnuson Determinations, i.e., Optimum Yield (OY), Domestic Annual Harvest (DAH), Domestic Annual Processing (DAP), Total Allowable Level of Foreign Fishing (TALFF), for a Pacific Island Exploratory Area (X-P-PI) is already contained within the FMP. As written, those values are the same for all Exploratory Areas. The difficulties associated with the initial determination of those values are enumerated and

discussed in the FMP. Primarily because no fishing has taken place under the FMP, those difficulties remain, and insufficient data/information is available at the present time for recommending changes.

B. Impact of the Rejected Alternative

1. No action

As stated earlier, this proposed action is simply a housekeeping measure. It brings the FMP in line with the FCMA as amended by Public Law 97-453, which extended the Council's management authority to the EEZ surrounding the Pacific Island Possessions. As the situation now stands, there is no provision for control over domestic fishing for precious corals in those waters, and any regulations regarding the fishery must be promulgated by the Secretary of Commerce. That situation would continue under the no action alternative.

8.2 Species in the Fishery Management Unit (FMU)

A. Impact of the Preferred Alternative

- 1. Place all species of Corallium (Corallium spp.) harvested by the fishery within the Management Unit Species (MUS) of the FMP.**

Through history precious coral fisheries are characterized by four distinct stages: exploration, discovery, exploitation, and depletion. Precious corals are long-lived, sessile animals. Populations are characterized by low rates of recruitment and natural mortality, so populations turn over very slowly. This life history makes precious coral resources particularly susceptible to overfishing. The FMP established management principles founded on those principles. The FMP was written before the discovery of Midway Deep-sea coral. That is the only reason that Midway Deep-sea is not included in the definition of the MUS.

This alternative would facilitate the following:

- 1. It would make the regulations of the fishery reflect the management intent of the FMP;**
- 2. It would specifically convey management to Midway Deep-sea coral (Corallium sp. nov.) which will almost certainly be harvested by domestic fishermen;**
- 3. It circumvents taxonomic uncertainties in the genus Corallium;**

4. It anticipates discovery and conveys management to other valuable commercially abundant species of Corallium.

This action is intended to convey the intent of the FMP to the harvest realities of the fishery. Therefore, although the action will expand the MUS, no distinct Magnuson determinations are appropriate. Harvests of any species included within the MUS by this action will contribute to the OY quotas already determined for Exploratory Areas.

B. Impact of the Rejected Alternatives

1. Only place Midway Deep-sea (Corallium species novum) in the Management Unit Species

This alternative is not technically possible. Common names are not recognized as valid within the international community. Scientific names based on species taxonomy are the only ones appropriate. Long intervals often transpire before the phylogenetic relationships of a species are accurately described or conjectured. Those investigations precede the assignment of a species name. To date, Midway Deep-sea coral remains undescribed scientifically. It has been placed in the genus Corallium however, and in the literature is referred to as Corallium species novum, or new species. In order to place Midway Deep-sea coral into the definition of precious corals in the Management Unit Species it must be included at the genus level. Its description and taxonomy beyond that are still uncertain. That precludes extending management only to Midway Deep-sea coral.

2. No action

This proposed action is a housekeeping measure designed to make the regulations for the fishery more accurately reflect the management intent of the FMP.

The FMP was written with a keen awareness of historical patterns of coral fishing, and it clearly recognizes the ease with which precious coral resources can be overharvested. The FMP concomitantly acknowledges the paucity of information that exists for coral resources within Exploratory Permit Areas, both in terms of species and abundance. These facts were instrumental in shaping the FMP regulations and objectives. One of the primary objectives of the FMP is to allow a fishery for precious corals but to also limit the fishery in order to achieve the Optimum Yield on a sustainable basis. Actual discovery of a new species of Corallium (Midway Deep-sea) and the coral strike that followed underscored the possibility of other discoveries within the vast expanses of the U.S. EEZ in the western Pacific. The definition of precious corals contained in the regulations does

not convey the intent of the FMP in light of both actual and potential discoveries.

The Midway grounds are the first likely location where domestic fishermen will focus fishing effort. The area of the Emperor Seamounts produced over 50 percent of the world's supply of precious corals between 1979-83. In 1983, the coral harvested from the Midway grounds totaled 140,000 kg, which represented 70 percent of the world's production (Grigg 1984). Numerous citations have been issued to Taiwanese and Japanese vessels caught fishing illegally for precious corals on the "Midway grounds" within the northwest reaches of the Hawaiian Islands Exploratory Area (Section 5.3) (Table 1).

Domestic operations will almost certainly concentrate initial fishing efforts in known coral regions, specifically the northwest portion of the Hawaiian Islands Exploratory Area. Harvests will almost certainly contain Midway Deep-sea coral (Corallium sp. nov.).

Midway Deep-sea coral is not listed in the definition of precious corals contained in the regulations of the FMP. No action will nullify the management philosophy which is the foundation of the FMP. As worded, the regulations do not govern the amount of Midway Deep-sea coral that can be harvested by domestic fishermen, although foreign harvest cannot be permitted.

The discovery of Midway Deep-sea coral also illustrates the taxonomic uncertainties which can be expected to accompany discoveries of new species. The taxonomy of Midway Deep-sea coral, although it was discovered in 1980, remains uncertain. It is simply listed as Corallium species novum (new species). Changing the definition of precious corals to Corallium spp., would render the taxonomic uncertainties within the genus a non-problem. Fishing and economic realities will ensure that this change only affects corals sufficiently abundant to be of commercial value. Under No action the risk of overharvesting Midway Deep-sea coral and any other commercially valuable, yet taxonomically unclassified species of Corallium will remain.

8.3 Experimental Fishing Permit (EFP) System

A. Impact of the Preferred Alternative

1. Create a provision for an Experimental Fishing Permit (EFP) for fishing within Exploratory Areas.

In view of the uncertainties that surround precious coral resources in Exploratory Areas, an EFP is the most favorable alternative. An EFP would provide positive impacts beyond ones which would result from increased quotas. An EFP offers greater

flexibility and shorter response times to detectable changes in the fishery. The first quotas attached to EFPs would be primarily based on operational economics. But with EFPs, quotas could be quickly brought in line with the resources based on the information collected by the fishery. Quota revisions would not take amendment form before they could be justified, at least in part, with biological/ scientific information. This approach is not only more flexible, but also considerably less costly than a series of quota revisions by amendment. The first amendment, to stimulate domestic fishing, would increase quotas without the benefit of stock assessment information. Later on, once the fishery collected enough data on the stocks, a second amendment would be submitted so quotas will reflect resource abundance. The amendment process is quite slow and costly for both the Council and the NMFS.

B. Impact of the Rejected Alternatives

1. Increase annual harvest quotas for Exploratory Areas

a. Establish a single increased quota

b. Establish two distinct quotas; one for selective gear and one for nonselective gear

These options can be jointly considered. Adoption of either, given sufficiently high quotas, would promote development of a domestic fishery for precious corals, one of the primary objectives of the FMP. The two differ in that option b recognizes operational differences between the two types of fishing and figures them into quota assignments. As outlined above, three components that would prominently figure into that process would be cost of operations, harvest efficiency, and catch value. However, these two options, and indeed any option which mandates new quotas, are severely hampered because assessment data on precious coral resources within Exploratory Areas of the western Pacific region do not presently exist (Precious Corals FMP). Resource potential can only be speculated, and only for the northwest portion of the Hawaiian Islands Exploratory Area, based on information solicited from Japanese and Taiwanese commercial fishing ventures which have concentrated fishing activities on the Emperor Seamounts (Table 1).

If quotas were set sufficiently high, either option is likely to stimulate domestic participation in the fishery. In turn, fishing activity would generate data on the distribution and abundance of precious corals within Exploratory Areas. That information could be used to assess stocks and manage the fishery. It could also serve to pinpoint locations for scientific research to target. Research funds would be saved due to

the early role played by private industry. However, if domestic fishing failed to materialize for some reason, despite the increased quotas, that amount of coral would have to be made available to foreign fishing.

Regardless of what quota was selected, it would not be based on scientific data regarding resource abundance. Quotas must necessarily be selected on the basis of operational economics, and some understanding of the way natural populations respond to harvesting over time (Grigg in press). An amendment that would increase or remove quotas not based on any form of stock assessment data is a risky proposition. The consequences of increasing quotas to levels necessary to stimulate the domestic fishery must be weighed against the risk of overharvesting and the potential for legal fishing by foreign vessels. Once fishing generates reliable resource data, it's almost certain that the FMP will require additional amendments to bring quotas in line with the amount of resources that actually exist. Such a sequence of amendments is a long and expensive process.

2. No action

If No action is taken, the existing condition will persist, specifically, no domestic precious corals fishery will develop. That lack of domestic involvement revolves around the present 1000 kg annual harvest quotas for Exploratory Areas. No legal foreign fishing has taken place since the FMP was implemented either. Foreign fishing is allowed if domestic fishermen have not harvested one half of the established quota by the midpoint of the fishing year.

Potential entrants have indicated that Exploratory Area quotas are too small to provide the economic incentive necessary to induce domestic participation. Knowledge of how the value of precious coral is determined and certain operational characteristics of both harvest methods aids evaluation of that claim.

The value of precious corals is dependent on color, size, abundance, and condition. Condition is judged by whether the coral was harvested dead or alive, the amount of encrusting, and the extent of boring by marine invertebrates. The two species commercially harvested in significant quantities within the Hawaiian islands chain are the shallow water species, Corallium secundum, and the undescribed species of Corallium referred to as Midway Deep-sea. Market value of C. secundum ranges between \$100 - \$120 per kilo. Midway Deep-sea is slightly less valuable, between \$60 - \$80 per kilo (Grigg 1984).

A best-case scenario under the present regulations illustrates why no domestic involvement would be predicted under the no action alternative. The most profitable situation poss-

ible would be where a single vessel successfully landed the entire 1000 kg quota from an Exploratory Area, and only coral with the highest value was harvested. Gross revenue would total \$120,000 for an entire Exploratory Area. Significant risk and uncertainty surround one, the discovery of precious coral beds in Exploratory Areas and two, successfully harvesting the resource. This combination of risk factors overshadows the relatively meager total gross revenues available. The years of no activity under the FMP have confirmed this impression.

Therefore, even though domestic interest in the fishery has recently been rekindled, the present Exploratory Area quotas hamper active participation. This is particularly true for selective harvester operations (unmanned submersibles). Cliff Slater, the president of Maui Divers Incorporated, which is the only selective harvest operation with a past history and a present interest in the fishery, estimated that a capital investment of \$750,000 would be necessary to initiate a selective harvest operation. The current quotas render that type of operation economically unfeasible.

Slater also cautioned that the costs associated with coral draggers are not as simple as they first appear. Despite comparatively low start-up costs, relatively high operational costs are associated with dredging. Those operational costs are linked to such factors as 1) harvest efficiency and 2) catch value. Harvest efficiency of tangle net dredges is about 40 percent. That is, dredges tangle about 40 percent of the coral that is knocked down per pass over an area of bottom. By repeatedly dragging an area, although each pass yields less coral, draggers may be capable of harvest efficiencies between 70-80 percent. Whether or not vessels will drag an area enough to reach this efficiency level depends on the particular circumstances at the time. Draggers also generally experience lower catch values than selective harvesters. As mentioned above, the value of coral is fundamentally linked to the size, color and condition of the piece. Large, completely intact trees of coral have the greatest value. Draggers land pieces of broken corals knocked down by the dredge stone and then tangled in the nets as the dredge was pulled along the bottom. Breakage may reduce a coral's value as much as 80 percent. Draggers can offset lower catch values to some degree by hauling multiple dredges to increase total harvest tonnage. In contrast, selective harvesters take coral so that it retains its highest value.

Therefore, although costs are partitioned differently for each type of operation, the present quotas offer insufficient economic incentives for both draggers and selective harvesters.

Table 6. Comparison of the impacts of Experimental Fishing Permits and alternatives.

Impacts	Alternatives Considered		
	No Action	Larger Quotas	EFP
Initiate Domestic Fishing	no	yes	yes
Provide Info. on Resources	no	yes	yes
Increase Chances for Foreign Fish. (TALFF)	no	yes	no
Ease of Enforcement	0	yes	yes
Flexibility for Management	no	no	yes
Flexibility in terms of Conservation	no	no	yes

9.0 Choice of Alternatives Based on the Objectives of the FMP / Enforceability

The preferred alternatives for each of the proposed actions were selected on the basis of how closely they were aligned with the related objectives of the FMP.

9.1 Specific Management Objectives

The objectives of the FMP that the proposed actions of this amendment will directly promote are:

1. to allow a fishery for precious corals in the Exclusive Economic Zone of the western Pacific, but to limit the fishery so as to achieve the optimum yield on a continuing basis;
2. to encourage the discovery and exploration of new beds;
3. to encourage the development of new information concerning the distribution, abundance and ecology of precious corals.

This amendment recognizes that the FMP fell short of its intention to promote a domestic fishery for precious corals. The stance of the FMP turned out to be particularly conservative because of the historical evidence which underscored the apparent ease with which resources could be overfished and depleted. All three actions proposed in this amendment work in concert toward responsible development of the domestic precious corals fishery. By formally placing the Pacific Island Possessions under the FMP, unregulated harvesting by domestic fishermen is prevented. Expanding the MUS not only extends FMP coverage to known species (specifically, Midway Deep-sea) almost certain to be harvested by the fishery, but also anticipates discovery of new species. EFPs facilitate domestic involvement in the fishery by recognizing operational economics. In turn, fishing under EFPs will assist in refining existing harvest quotas by collecting badly needed data on resource abundance and distribution.

9.2 MFCMA Determinations

The FMP as approved made the required determinations of MSY, OY, DAH, DAP, and TALFF. Those are not changed by this amendment.

The FMP did not specify joint venture processing (JVP). That specification was not required under the MFCMA in 1980.

There is sufficient domestic processing capacity to accomodate increased harvests. The FMP indicates that the U.S. imports semi-processed coral for finishing into jewelry. Domestic production would replace imports, if the FMP has the ultimate desired effects. The Council concludes that there is no excess harvest capacity to warrant joint venture processing, and no precious coral is available for joint ventures.

10.0 Relationship of Amendment 1 to Other Applicable Laws and Policies

10.1 Coastal Zone Consistency

Section 307 (c) (1) of the Federal Coastal Zone Management Act of 1972 (CZMA) require that all Federal activities which directly affect the coastal zone be consistent with approved State coastal zone management programs to the maximum extent practicable.

The State CZM policies directly relating to the actions proposed in this amendment are contained in the coastal ecosystems and economic use resources categories of the Hawaii CZM statute (Act 188 of 1977, Chapter 205A, HRS, as amended). Those policies are to 1) improve the technical basis for natural resource management, 2) preserve valuable coastal (offshore) ecosystems of significant biological importance, and 3) minimize adverse environmental effects from economic uses of coastal zone resources. The actions of this amendment are fully consistent with these objectives.

Two existing situations could potentially impact the way that a) expanding the MUS, and b) establishing EFPs affect consistency between State and Federal regulations. First, the State of Hawaii exercises some authority under S306 of the MFCMA over the harvesting of precious corals outside of three miles. Under Regulation 41 of the Division of Aquatic Resources, the State has adopted a quota and/or permit system for the management of pink and gold corals in the Makapu'u Bed which lies about 6 miles off the island of Oahu. Second, the State of Hawaii claims management and conservation jurisdiction over all resources enclosed within archipelagic baselines. State jurisdiction over the Makapu'u Bed as well as other interisland waters remains an unsettled issue between the State and the Federal government. Still, the proposed management and conservation actions within this amendment are in agreement with State of Hawaii CZM policy.

The Council has reviewed the Coastal Zone Management Programs of American Samoa, Guam and the Commonwealth of the Northern Mariana Islands and found the actions of this amendment consistent with policies set forth on fisheries and living marine

resources. The Council has requested reviews of this amendment from agencies responsible for CZM policy within each government.

10.2 Marine Mammal Protection Act / Endangered Species Act

The management measures of the FMP document were judged not to have any significant impact on marine mammals or endangered species. Those conclusions were based on the characteristics of precious corals habitat and the fishing techniques used to harvest precious corals. The NMFS rendered a biological opinion that confirmed that conclusion (Appendix 4, Precious Corals FMP). The actions proposed in this amendment are passive with regard to habitat and conventional fishing practices. The measures of Amendment 1 will not impose any new or increased risks to marine mammals or endangered species.

10.3 National Environmental Policy Act - Environmental Assessment

The need for this amendment, the proposed actions, and their impacts are discussed in Sections 4, 7, and 8.

The proposed amendment is not a major action, and it will not have significant impacts on the marine or human environment of the EEZ within the Council's jurisdiction. Amendment 1 does not alter the management and conservation policies set forth in the FMP. The actions are two housekeeping measures which enhance the conservation features of the FMP, while the third action, a provision for EFPs, simply facilitates the fishery development intent of the original document. The proposed actions will not result in impacts significantly different in context or intensity from those described in the Environmental Impact Statement (EIS) published in February of 1980. Therefore, an EIS for this amendment is not required under the Categorical Exclusion criteria set forth in NOAA Directive 02-10 Section 5c(3)(f).

Mitigating Measures Related to the Proposed Actions:

None

Unavoidable Adverse Effects:

None

Relationship Between Local Short-term uses of the Resources and Enhancement of Long-term Productivity:

The actions of this amendment should promote the long term use of precious coral resources. Presently resources are not utilized at all. This amendment is designed to promote development of a domestic fishery. The data gained from fishing under EFPs will add significantly to the scant

existing information on resource abundance and distribution. In turn, these data will promote refinement of management and conservation measures to ensure long-term productivity of precious coral resources.

Irreversible and Irretrievable Commitment of Resources:
None

Notwithstanding the above, the Regional Director and the Council will consider and document any environmental concerns associated with particular EFP proposals and may propose control measures necessary to ensure prevention of any likely adverse environmental impacts.

10.4 Determination of Impacts Under Executive Order 12291 and the Regulatory Flexibility Act

The actions proposed in this amendment are not viewed as major. None of the actions, or all of them together, will produce an annual effect on the economy greater than or equal to \$100 million. In 1980, the estimated value of the entire industry in the world's largest producing nations of Taiwan and Japan was only half that, or \$50 million. That value was the combined production of some 300 vessels (Grigg 1982), of which about 120 were 100 ton vessels involved in the distant water fishery for precious corals. Existing regulations only permit 1000 kg harvests for individual Exploratory Areas. Even after EFPs are issued, and somewhat greater harvests are permitted, the direct impact of the actions of this amendment would not reach the level of \$100 million.

These proposed changes are likely to have a positive impact on local small business entities. Precious coral jewelry is a popular item in the local tourist trade. The authenticity of jewelry manufactured from corals harvested from nearby waters is likely to enhance product value. The Hawaii precious corals jewelry industry has been estimated to be between \$17 - \$25 million (Grigg 1982, Slater pers. comm.).

The specific economic and social impacts of the EFP process cannot be determined at this time. The Regional Director and the Council will consider economic and social aspects in reviewing and taking action on specific EFP proposals. This consideration will be documented as part of the approval/disapproval process for EFP applications.

10.5 Applicability of the Paperwork Reduction Act

Two of the actions proposed in this amendment are not likely to create any additional paperwork burden because permit forms and catch report forms already exist. Creation of the Pacific

Island Possessions Exploratory Area (X-P-PI) and expanding the MUS will not require additional forms. The present fishing logbook regulation requires reporting harvests of precious corals by area, by species, by weight. Similarly, existing permit forms already include a block for designating permit area.

Creation of an EFP will produce an added, unavoidable, paperwork burden. Information in addition to what's presently required will be necessary. Applicants will be requested to submit enough operational information to justify individual quota and operating period requests (see Sections 4.3 and 8.3). Guidelines developed by the Council for use in evaluating EFP applications will outline the sort of information considered necessary. Pertinent information may include start-up costs, estimated trip costs, and costs associated with any shoreside handling and processing that might be required. Information requirements will be set by regulations implementing this amendment.

10.6 Consideration of Vessel Safety Issues

None of the actions proposed in this amendment imposes any regulations or restrictions on vessels that can be used in the fishery. Therefore, vessel safety will not be affected in any way. Nonetheless, this amendment has been sent to the U.S. Coast Guard for evaluation regarding vessel safety. Similarly, the Coast Guard will be asked to review and advise the NMFS regarding safety and enforcement matters with respect to specific EFP proposals.

11.0 Indigenous Fishing Rights

There are no formal agreements between the Federal government and the native Hawaiians, Samoans, or Chamorros that allocate special fishing entitlements to indigenous peoples. However, the legal possibility of granting such rights is presently being investigated. The research specifically pertains to the bottomfish fishery of the Northwestern Hawaiian Islands. If that research concludes that indigenous peoples should be awarded special considerations in the NWHI bottomfishery, and that finding holds for other fisheries as well, then FMPs and amendments may require revision. However, under the prevailing circumstances, it does not appear that this amendment will affect any native Hawaiian, Samoan, or Chamorro cultural or religious practices.

12.0 References

- Grigg, R. W. 1971. Status of the precious coral industry in Japan, Taiwan, and Okinawa: 1970. Sea Grant Advisory Report. UNIH-SEAGRANT-ADV-RPT-71-02. 12 pp.
- Grigg, R. W. 1974. Distribution and abundance of precious corals in Hawaii. In: Second International Symposium on Coral Reefs, Great Barrier Reef, Australia, 1973. Proceedings 2:235-240.
- Grigg, R. W. 1976. Fishery management of precious and stony corals in Hawaii. Sea Grant Technical Report. UNIH-SEAGRANT-TR-77-03. 48 pp.
- Grigg, R. W. 1981. Status of the precious coral industry in the Pacific: 1981. Western Pacific Regional Fishery Management Council Contract Report No. WPC - 00181. 15 pp.
- Grigg, R. W. 1982. Economics and future development of the precious coral fishery in the Pacific. Infofish Marketing Digest, 2:8-11.
- Grigg, R. W. 1982a. Status of the precious coral industry in 1982. Western Pacific Regional Fishery Management Council Contract Report No. WPC - 0483. 13 pp.
- Grigg, R. W. 1983. Review of the precious corals fishery-1983. Western Pacific Regional Fishery Management Council Report. 7 pp.
- Grigg, R. W. 1984. Resource management of precious corals: a review and application to shallow water reef building corals. Marine Ecology, 5(1):57-74.
- Grigg, R. W. in press. Recruitment limitation of a deep benthic hard-bottom coral population in the Hawaiian Islands. 17pp.
- Western Pacific Regional Fishery Management Council. 1980. Fishery management plan and proposed regulations for the precious coral fishery of the Western Pacific region. U.S. Federal Register, 45(180):60957-61002.

13.0 Appendix I

National Oceanic and Atmospheric Administration

50 CFR Part 680

[Docket No.

Western Pacific Precious Coral Fisheries

Agency: National Marine Fisheries Service (NMFS), NOAA, Commerce

Action: Proposed rule

Summary: NOAA issues a proposed rule to implement Amendment 1 to the Fishery Management Plan for the Precious Coral Fisheries of the Western Pacific Region (FMP), adopted by the Western Pacific Regional Fisheries Management Council (Council) at its 61st meeting in Honolulu, Hawaii on February 25-26, 1988. Amendment 1 would (1) include the E.E.Z. around the U.S. Pacific possessions in the FMP management area, (2) expand the management unit species to include all precious coral in the genus Corallium, and (3) establish an experimental fishing permit (EFP) under the FMP. The intent of the amendment is to establish Council management authority over the full range of precious coral resources in the EEZ and encourage domestic exploratory fishing for precious coral under controlled conditions.

Date: Written comments must be submitted on or before

Address: Send comments to E.C. Fullerton, Director, Southwest Region, National Marine Fisheries Service, 300 South Ferry Street, Terminal Island, CA 90731. A copy of the amendment may be obtained by contacting the Western Pacific Regional Fishery Management Council (Council), 1164 Bishop Street, Suite 1406, Honolulu, Hawaii 96813, 808/523-1368.

For Further Information Contact: Doyle E. Gates, Administrator, Western Pacific Program Office, 2570 Dole St., Room 106, Honolulu, Hawaii, 96822-2396, 808/955-8831.

SUPPLEMENTARY INFORMATION

The domestic and foreign fisheries for precious coral in the exclusive economic zone (EEZ) adjacent to the State of Hawaii and the territories of Guam and American Samoa are managed under the Fishery Management Plan for the Precious Coral Fisheries of the Western Pacific Region (FMP). The FMP was developed by the Western Pacific Regional Fishery Management Council (Council) under the Magnuson Fishery Conservation and Management Act

(Magnuson Act), approved by the Secretary of Commerce on May 20, 1980, and implemented September 29, 1983 (48 FR 39229; August 30, 1983).

U.S. Possessions

When the FMP was first approved in 1980, the jurisdiction of the Council, as defined by the Magnuson Act, did not extend to the EEZ around the U.S. possessions in the western Pacific. As such the Precious Coral FMP management area included the EEZ around Hawaii, Guam and American Samoa only. With the passage of Public Law 99-453 in 1983, the Magnuson Act was amended to extend Council jurisdiction to the EEZ around the U.S. Pacific possessions.

Amendment 1 would formally incorporate the EEZ around the U.S. possessions in the FMP management area and create a new combined single exploratory area (X-P-PI) for the U.S. possessions. The new exploratory area would have a 1000 kg annual harvest quota for all species of precious corals combined. The areas affected by this action include the EEZ around Wake Island, Johnston Atoll, Kingman Reef and Palmyra Island, Jarvis Island and Howland and Baker Islands. The management measures proposed for the possessions are consistent with the regulations currently in place for the other exploratory areas defined in the FMP.

Redefine the Management Unit Species

Amendment 1 proposes to expand the definition of precious coral covered under the FMP to include all species of the genus Corallium. The management unit species as defined in the regulations cover twelve species of coral, three of which are pink (or red) coral in the genus Corallium. The Council determined that this definition is unnecessarily restrictive in that it fails to recognize present taxonomic uncertainties that surround the recently discovered Midway Deepsea coral (Corallium sp. nov.), and does not provide automatic FMP management authority in the event new species of Corallium precious corals are discovered in the EEZ. In order to circumvent these taxonomic problems, the Council proposes to expand the definition of precious coral to include all species of coral in the genus Corallium. Harvest quotas established for the exploratory areas remain unchanged. However, harvests of any new species of Corallium will count toward the established quotas.

Experimental Fishing Permit (EFP)

The original goal of the FMP was to obtain optimum yield from the precious coral fishery in the EEZ by striking a balance among several objectives. These objectives included, among others, (1) encouraging development of a domestic fishery for precious coral, (2) generating new information needed for resource

management, and (3) preventing overfishing and wastage of the resource. That goal has not been achieved.

The original FMP established a harvest quota of 1000 kg of precious coral for each of the three exploratory areas defined in the FMP. It was believed that a 1000 kg quota would provide sufficient incentive to stimulate exploration and discovery of new coral beds.

Rather than stimulate exploratory fishing for precious coral, the 1000 kg quota has proven to be too low to justify the financial investments required by domestic fishermen to explore for and harvest precious coral. As such, there has been no legal fishing for precious coral by domestic or foreign fishermen since the FMP first went into effect. Furthermore, the absence of domestic or foreign fishing has prevented the Council and NMFS from obtaining any new information on precious coral resources which could be used to refine the current management program. Neither State nor Federal fishery research budgets currently are able to finance a new research initiative focused on precious coral.

In order to address these problems, the Council has proposed the establishment of an experimental fishing permit (EFP). An EFP would allow fishermen to harvest precious coral in exploratory areas above current quota levels under tightly controlled conditions. Harvest quotas would be assigned on a case-by-case basis to each vessel fishing under an EFP at a level that would be more directly related to the cost of undertaking an exploratory fishing venture for precious coral and that would produce the type of scientific information needed to better manage the resource. An EFP application and review process is established which defines the application requirements, review criteria, and operating conditions which may be attached to an EFP in order to protect precious coral beds. An opportunity for public comment on EFP applications is provided. In addition, the Council will develop guidelines for its use in evaluating EFP applications and making recommendations to the Regional Director.

The Council recognizes the need to increase harvest quotas in order to stimulate domestic fishing and generate information needed for accurate resource assessment. However, because of limited information available on the size and reproductive condition of precious coral beds, the Council was reluctant to propose and unable to justify a permanent increase in harvest quotas. Controlled fishing under an EFP was the preferred alternative to accomplish these objectives. Information generated by vessels fishing under an EFP will allow the Council to develop future harvest quotas which are more in line with resource abundance.

Classification

Section 304(a)(1)(D)(ii) of the Magnuson Act, as amended by Public Law 99-659, required the Secretary of Commerce (Secretary) to publish regulations proposed by a Council within 15 days of receipt of any amendment to an FMP. At this time the Secretary has not determined that the FMP amendment that these rules would implement is consistent with the national standards, other provisions of the Magnuson Act, and the other applicable law. The Secretary, in making that determination, will take into account the data, views, and comments received during the comment period.

The Council prepared an environmental assessment as a part of the FMP and concluded that there will be no significant impact on the environment as a result of this rule.

The Administrator of NOAA determined that this proposed rule is not a "major rule" requiring a regulatory impact analysis under Executive Order 12291. The present action will not have a cumulative effect on the economy of \$100 million or more nor will it result in a major increase in costs to consumers, industries, government agencies, or geographical regions. No significant adverse effects on competition, employment, investments, productivity, innovation, or competitiveness of U.S. based enterprises are anticipated.

The Council prepared a regulatory impact review which concludes that this rule will have a positive impact on small business entities. Current FMP regulations and harvest quotas have effectively prevented any domestic fishing for precious coral, particularly in the Hawaii exploratory area. The proposed rule is expected to provide new harvesting opportunities for domestic fishermen.

This proposed rule is exempt from the review procedures of E.O. 12291 under section 8(a)(2) of that order. Deadlines imposed under the Magnuson Act, as amended by Public Law 99-659, require the Secretary to publish this proposed rule 15 days after its receipt. The proposed rule is being reported to the Director, Office of Management and Budget, with an explanation of why it is not possible to follow procedures of the order.

The General Counsel of the Department of Commerce certified to the Chief Counsel for Advocacy of the Small Business Administration that this proposed rule, if adopted, will not have a significant economic impact on a substantial number of small businesses because there are no domestic vessels currently operating in the fishery. Any impact on small businesses as a result of this rule is expected to be positive. As a result a regulatory flexibility analysis was not prepared.

This rule contains a collection of information requirement subject to the Paperwork Reduction Act. Information will be collected from interested persons applying for experimental fishing permits as required by the FMP. The collection of information requirements contained in this rule have been submitted to OMB for review under Section 3504(h) of the Act. Comments on the proposed information collections should be sent to the Office of Information and Regulatory Affairs of OMB, Attention: Desk Officer for NOAA.

The Council has determined that the measures established in Amendment 1 are consistent to the maximum extent practicable with the approved coastal zone management programs of American Samoa, Guam, and Hawaii. Letters requesting concurrence with this finding have been forwarded to the responsible agency within each government.

List of Subjects in 50CFR Part 680

Fisheries, Reporting and recordkeeping requirements.

Dated:

Proposed Regulations

PART 680 - [AMENDED]

1. The authority citation for 50 CFR Part 680 continues to read as follows:

Authority: 16 USC 1801 et seq.

2. In Subpart A of Part 680, §680.1, paragraph (b) is revised to read as follows:

§680.1 Purpose and Scope

* * * * *

(b) These regulations govern fishing for precious coral by fishing vessels of the United States within the exclusive economic zone seaward of Hawaii, Guam, American Samoa and the U.S. possessions in the western Pacific.

* * * * *

3. In §680.2, the definition for Fishery conservation zone (FCZ) is removed and a new definition for Exclusive economic zone (EEZ) is added in alphabetical order; and the definitions of Management area, Permit area, and Precious coral are revised to read as follows:

\$680.2 Definitions

* * * * *

Exclusive economic zone (EEZ) means the zone established by Presidential Proclamation 5030, dated March 10, 1983, and is that area adjacent to the United States which, except where modified to accommodate international boundaries, encompasses all waters from the seaward boundary of each of the coastal States to a line on which each point is 200 nautical miles from the baseline from which the territorial sea of the United States is measured.

Management area means the EEZ of the United States seaward of the State of Hawaii; the Territory of Guam; the Territory of American Samoa and the U.S. possessions in the western Pacific.

Permit area is used to describe each precious coral bed in the management area. Each bed is designated by a permit area code and assigned to one of the following four categories:

* * * * *

(d) * * *

(1) * * *

(2) * * *

(3) * * *

(4) Permit Area X-P-PI includes all coral beds, other than established beds, conditional beds, or refugia, in the EEZ seaward of the U.S. possessions in the western Pacific.

Precious coral means any coral of the genus Corallium in addition to the following species of corals:

* * * * *

4. In Subpart A of Part 680, a new section \$680.10 Experimental fishing permits (EFP) is added as follows:

\$680.10 Experimental fishing permits (EFP)

(a) General. The Secretary may authorize the direct or incidental harvest of precious coral managed by the FMP which would otherwise be prohibited by this part. No experimental fishing may be conducted unless authorized by an experimental fishing permit (EFP) issued by the Secretary in accordance with

the criteria and procedures specified in this section. EFP's will be issued without charge.

(b) Application. An applicant for an EFP shall submit to the Regional Director at least 60 days before the desired effective date of the EFP a written application including, but not limited to, the following information:

- (1) The date of the application;
- (2) The applicant's name, mailing address, and telephone number;
- (3) A statement of the purposes and goals of the experiment for which an EFP is needed, including a general description of the arrangements for disposition of all species harvested under the EFP;
- (4) A statement of whether the proposed experimental fishing has broader significance than the applicant's individual goals;
- (5) For each vessel to be covered by the EFP:
 - (i) Vessel name;
 - (ii) Name, address, and telephone number of owner and master;
 - (iii) U.S. Coast Guard documentation, State license, or registration number;
 - (iv) Home port;
 - (v) Length of vessel;
 - (vi) Net tonnage;
 - (vii) Gross tonnage;
 - (viii) Radio call sign;
 - (ix) Engine horsepower; and
 - (x) Approximate fish hold capacity.
- (6) A description of the species (directed and incidental) to be harvested under the EFP and the amount(s) of such harvest necessary to conduct the experiment;

(7) For each vessel covered by the EFP, the approximate time(s) and place(s) fishing will take place, and the type, size, and amount of gear to be used; and

(8) The signature of the applicant.

The Secretary may request from an applicant additional information necessary to make the determinations required under this section. An applicant will be notified of an incomplete application within 10 working days of receipt of the application. An incomplete application will not be considered until corrected in writing.

(c) Issuance

(1) If an application contains all of the required information, the Secretary will publish a notice of receipt of the application in the FEDERAL REGISTER with a brief description of the proposal, and will give interested persons an opportunity to comment. The Secretary will also forward copies of the application to the Western Pacific Fishery Management Council, the U.S. Coast Guard, and the fishery management agency of the affected State.

(2) At a Western Pacific Fishery Management Council meeting following receipt of a complete application, the Secretary will consult with the Council, the U.S. Coast Guard, and the Director of the affected State fishery management agency concerning the permit application. The applicant will be notified in advance of the meeting at which the application will be considered, and invited to appear in support of the application if the applicant desires.

(3) Within 5 working days after the consultation in paragraph (c) (2) of this section, or as soon as practicable thereafter, the Secretary shall notify the applicant in writing of the decision to grant or deny the EFP, and, if denied, the reasons for the denial. Grounds for denial of an EFP include, but are not limited to, the following:

(i) The applicant has failed to disclose material information required, or has made false statements as to any material fact, in connection with his or her application; or

(ii) According to the best scientific information available, the harvest to be conducted under the permit would detrimentally affect any species of fish in a significant way; or

(iii) Issuance of the EFP would inequitably allocate fishing privileges among domestic fishermen or would have economic allocation as its sole purpose; or

(iv) Activities to be conducted under the EFP would be inconsistent with the intent of this section or the management objectives of the FMP; or

(v) The applicant has failed to demonstrate a valid justification for the permit; or

(vi) The activity proposed under the EFP would create a significant enforcement problem.

(4) The Secretary will publish a notice in the FEDERAL REGISTER announcing the decision to grant or deny an EFP. If the permit is granted, the FEDERAL REGISTER notice will describe the experimental fishing to be conducted under the EFP. The Secretary may attach terms and conditions to the EFP consistent with the purpose of the experiment including, but not limited to:

(i) The maximum amount of each species which can be harvested and landed during the term of the EFP, including trip limits, where appropriate;

(ii) The number, sizes, names, and identification numbers of the vessels authorized to conduct fishing activities under the EFP;

(iii) The time(s) and place(s) where experimental fishing may be conducted;

(iv) The type, size, and amount of gear which may be used by each vessel operated under the EFP;

(v) The condition that observers be carried aboard vessels operated under an EFP;

(vi) Data reporting requirements; and

(vii) Such other conditions as may be necessary to assure compliance with the purposes of the EFP consistent with the objectives of the FMP.

(d) Duration. The effective period of the permit will be specified by the Secretary in the terms of the EFP. An EFP may be renewed by following the application procedures in this section.

(e) Alteration. Any permit that has been altered, erased, or mutilated is invalid.

(f) Transfer. EFPs issued under this part are not transferable or assignable. An EFP is valid only for the vessel(s) for which it is issued.

(g) Inspection. Any EFP issued under this part must be carried aboard the vessel(s) for which it was issued. The EFP must be presented for inspection upon request of any authorized officer.

(h) Surrender. Upon issuance of an EFP the applicant must surrender to the Regional Director any permit to fish for precious coral that was issued under section 680.4 of this part.

(i) Sanctions. Failure of the holder of an EFP to comply with the terms and conditions of an EFP, the provisions of Subpart B of this part, any other applicable provision of this part, the Magnuson Act, or any other regulation promulgated thereunder, shall be grounds for revocation, suspension, or modification of the EFP with respect to all persons and vessels conducting activities under the EFP. Any action taken to revoke, suspend, or modify an EFP for enforcement reasons will be governed by 15 CFR Part 904 Subpart D.

(j) Permit modification. Where circumstances have changed such that a permittee desires to modify any term or condition of an EFP, the permittee must submit to the Regional Director, a written request which provides full justification and supporting information for the proposed modification. Such applications for modification are subject to the same issuance criteria as are original applications, as provided in paragraph(c) of this section. Modifications to an EFP which are of a technical nature only and do not affect the substance of the fishing activity authorized by the EFP may be approved by the Regional Director without the notice and consultation provided for in paragraphs(c)(1) and (2) of this section.

(k) Appeals of administrative action.

(1) Except as provided in Subpart D of 15 CFR 904, an applicant for a permit or a permit holder may appeal the denial or conditioning of a permit under § 680.10 to the Assistant Administrator for Fisheries, NOAA. In order to be considered by the Assistant Administrator, such appeal must be in writing, must state the action(s) appealed, and the reasons therefore, and must be submitted within 30 days of the action(s) by the Regional Director. The appellant may request an informal hearing on the appeal.

(2) Upon receipt of an appeal authorized by this section, the Assistant Administrator may request such additional information and in such form as will allow action upon the appeal. Upon receipt of sufficient information, the Assistant

Administrator will decide the appeal in accordance with the criteria set out in § 680 and the amendment to the Precious Coral FMP, as appropriate, based upon information relative to the application on file at the NMFS and the Western Pacific Fishery Management Council and any additional information, the summary record kept of any hearing and the hearing officer's recommended decision, if any, as provided in paragraph k (3) of this section, and such other considerations as deemed appropriate. The Assistant Administrator will notify all interested persons of the decision, and the reason(s) therefore, in writing, normally within 30 days of the receipt of sufficient information, unless additional time is needed for a hearing.

(3) If a hearing is requested or if the Assistant Administrator determines that one is appropriate, the Assistant Administrator may grant an informal hearing before a hearing officer designated for that purpose after first giving notice of the time, place and subject matter of the hearing in the FEDERAL REGISTER. Such hearing shall normally be held no later than 30 days following publication of the notice in the FEDERAL REGISTER unless the hearing officer extends the time for reasons deemed equitable. The appellant and, at the discretion of the hearing officer, other interested persons, may appear personally or by counsel at the hearing and submit such material and present such arguments as determined appropriate by the hearing officer. Within 30 days of the last day of the hearing, the hearing officer shall recommend in writing a decision to the Assistant Administrator.

(4) The Assistant Administrator may adopt the hearing officer's recommended decision, in whole or in part, or may reject or modify it. In any event, the Assistant Administrator will notify interested persons of the decision, and the reason(s) therefore, in writing within 30 days of receipt of the hearing officer's recommended decision. The Assistant Administrator's action shall constitute final action for the agency for the purposes of the Administrative Procedures Act.

(5) Any time limit prescribed in this section may be extended for a period not to exceed 30 days by the Assistant Administrator for good cause, either upon his or her own motion or upon written request from the appellant stating the reason(s) therefore.

(1) Protected species. Vessels fishing under an EFP are required to report any incidental take of fisheries interaction with protected species on a form provided for that purpose. Reports must be submitted to the Regional Director within 3 days of arriving in port.

5. In §680.21, Table 1, the coral bed named "Hawaii, American Samoa, Guam" is revised to read as "Hawaii, American Samoa, Guam, U.S. possessions."

§680.2, 680.4, 680.7, 680.21, and 680.25 [Amended]

6. In addition to the amendments set forth above, the initials "FCZ" are removed and the initials "EEZ" are added in their place in the following places: §680.2, definition for Permit area; 680.4(k); 680.7(a); 680.21(a) Table 1, footnote(c); and 680.25.



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Southwest Region
300 South Ferry Street
Terminal Island, California 90731-7415

F/SWR1:ETN

Ms. Kitty Simonds
Executive Director
Western Pacific Regional Fishery
Management Council
1164 Bishop Street, Suite 1405
Honolulu, HI 96813

Dear Kitty:

This acknowledges your request to initiate Section 7 consultation for Amendment 1 to the Fishery Management Plan (FMP) for the Precious Corals Fisheries of the Western Pacific Region. We have reviewed the three proposed actions of the amendment and concur with the assessment that these actions are not likely to add any new risks or increase risks to listed species. Since the original Biological Opinion for this FMP concluded that the fishery did not constitute a threat to threatened or endangered species or their habitat, and the proposed actions are passive with regard to habitat and conventional fishing practices, we find that the implementation of Amendment 1 will not likely adversely affect listed species under the jurisdiction of the National Marine Fisheries Service. Accordingly, formal consultation will not be required for this action. However, we will continue to monitor the development and implementation process of the Amendment informally.

Sincerely yours,

Chas
E.C. Fullerton
Regional Director

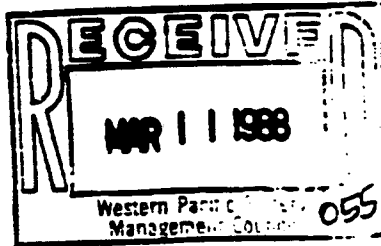
cc: F/SWR1



U.S. Department
of Transportation
United States
Coast Guard



Commander (ole)
Fourteenth Coast Guard District



Prince Kalanianaʻole
Federal Building
300 Ala Moana Blvd
Honolulu, Hawaii 96850
Phone: (808) 541-2300

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Mr. Paul Gates
Western Pacific Fishery
Management Council
1164 Bishop St. - Room 1405
Honolulu, Hawaii 96613

Dear Mr. Gates:

You have requested Coast Guard input on Amendment #1 to the Precious Corals Fishery Management Plan for the Western Pacific Region. Specifically, you have requested a written evaluation on the effects on safety of Amendment #1.

Section 303(a) of the Magnuson Fishery Management and Conservation Act (MFCMA), as amended on 14 November 1986, provides, among other things,

... any fishery management plan which is prepared by any Council...with respect to any fishery shall...consider, and may provide for, temporary adjustments, after consultation with the Coast Guard and persons utilizing the fishery, regarding access to the fishery for vessels otherwise prevented from harvesting because of weather or other ocean conditions affecting the safety of the vessels.....16 U.S.C. 1853(a) (as amended by Pub. L. No. 99-659, Sec 105(a)(1)(c)).

Amendment #1 does not call for temporary adjustments, such as altering a closure schedule, to accommodate fishing vessels prevented from harvesting by weather or other ocean conditions affecting vessel safety. Consequently, there is no issue in this amendment to be addressed by the Coast Guard within the statutory guidelines of the MFCMA.

Please feel free to contact me concerning any additional inquiries you may have.

Sincerely,

M. J. Williams, Jr.
M. J. WILLIAMS, JR.

Commander, U. S. Coast Guard
Chief, Law Enforcement Branch
By direction of the District Commander



DEPARTMENT OF BUSINESS AND ECONOMIC DEVELOPMENT

KAMAMALU BUILDING, 239 SOUTH KING ST., HONOLULU, HAWAII
MAILING ADDRESS: P.O. BOX 2259, HONOLULU, HAWAII 96824 TELE: 7430230 HDPED

JOHN WAIHEE
GOVERNOR

ROGER A. ULVELING
DIRECTOR

BARBARA KIM STANTON
DEPUTY DIRECTOR

LESLIE S. MATSUBARA
DEPUTY DIRECTOR

Ref. No. P-8173

March 11, 1988

MAR 17 1988

Western Pacific Fishery
Management Council 092

Ms. Kitty Simonds
Executive Director
Western Pacific Regional Fishery
Management Council
1164 Bishop Street, Room 1405
Honolulu, Hawaii 96813

Dear Ms. Simonds:

Subject: Federal Consistency Determination for Amendment #1
to the Fishery Management Plan for the Precious Coral
Fisheries (File No. FC/88-013)

This is to inform you that we have reviewed your assessment of the subject activity's consistency with Hawaii's Coastal Zone Management Program (CZM) and concur with your finding that the activity is consistent. By copy of this letter, we are informing the Federal permit issuing agency that CZM consistency review requirements have been met.

Sincerely,

Roger A. Ulveling
Roger A. Ulveling

cc: National Marine Fisheries Service
Western Pacific Program